ENVIRONMENTAL CHEMISTS

Date of Report: 04/27/99 Date Received: 04/22/99

Project: Metro Self Monitor, PO# M61845

Date Samples Extracted: 04/23/99 Date Extracts Analyzed: 04/23/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	Zinc
M61845	0.41	0.43	0.39	0.07
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Project: Metro Self Monitor, PO# M61845

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 904093-01 (Duplicate)

공공하는 이 회장 하는 경찰 등장이				Relative	
	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
 Chromium	mg/L (ppm)	0.41	0.41	0	0-20
Copper	mg/L (ppm)	0.43	0.41	5	0-20
Nickel	mg/L (ppm)	0.39	0.40	3	0-20
Zinc	mg/L (ppm)	0.07	0.07	0	0-20

Laboratory Code: 904093-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	
Analyte	Units	Level	Result	MS	MSE	Criteria	RPD
Chromium	mg/L (ppm)	5	0.41	87	92	80-120	6
Copper	mg/L (ppm)	5	0.43	87	91	80-120	4
Nickel	mg/L (ppm)	10	0.39	85	88	80-120	3
Zinc	mg/L (ppm)	5	0.07	86	88	80-120	2

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recover	y % Recov	ery Acceptance	9	
Analyte	Units	Level	LCS	LCSD	<u>Criteria</u>	RPD	
Chromium	mg/L (ppm)	5	105	96	80-120	9	
Copper	mg/L (ppm)	5	106	90	80-120	16	
Nickel	mg/L (ppm)	10	106	99	80-120	7	
Zinc	mg/L (ppm)	5	108	103	80-120	5	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

H909093

MM AE, 4/22/29

SAMPLE CHAIN OF CUSTOD

Send Report To: Alaskan Copper Works Contact Gerald A. Thompson									
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City, State, Zip_Seas	He up	58134							
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					Dispose after 30 days Return Samples				
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FORMS/COC

04/02/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 27, 1999

DUPLICATE COPY

INVOICE #99ACU0427-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M61845: Results of testing requested by Gerry Thompson for material submitted on April 22, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 27, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 22, 1999 from your Metro Self Monitor, PO# M61845 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0427R.DOC